

CLAIMS

1. A web transfer mechanism for providing, in a flexible sheet material dispenser, automatic transfer of web feed from a working roll to a reserve roll, comprising:

5 a main feed roller and a second roller forming a feed nip for receiving therethrough a sheet material web;

a sensing mechanism including a sensor plate movable between a web-present position and a web-absent position, said sensor plate resting, in the web-present position, on a pre-feed portion of sheet material web extending between the working roll and the nip, and being biased towards the web-absent position;

10 a stop arm, said stop arm being mounted for movement between first and second positions, responsive to movement of said sensor plate; and

a transfer arm mounted adjacent to the main feed roller, said transfer arm being biased toward and movable into a transfer position, wherein movement of the transfer arm into the transfer position is operative to drive a leading end portion of sheet material web extending 15 from said reserve roll into the vicinity of the feed nip such that upon driving of the main feed roller, the web from the reserve roll is carried through the feed nip, the transfer arm being held in a set position by the stop arm when said stop arm is in the first position, and being released from the set position to move to said transfer position upon said stop arm moving into said second position.

20 2. A web transfer mechanism according to claim 1, wherein said main feed roller incorporates therein a web cutting knife which emerges from the main feed roller during a dispensing cycle, to cut-off a predetermined length of dispensed web material.

3. The web transfer mechanism of claim 1, wherein said sensor plate is pivotably mounted adjacent a first edge thereof, and a second edge opposite said first edge contacts said pre-feed portion of sheet material web.

4. The web transfer mechanism of claim 3, wherein chassis components of said dispenser form a receptacle for retaining a working stub roll, and said sensor plate extends across, and forms a movable cover over, said receptacle.

5. The web transfer mechanism of claim 4, wherein the sensor plate is pivotable about said first edge to an open position permitting placement of a stub roll within said receptacle.

10. 6. The web transfer mechanism of claim 5, wherein at least one finger hole is provided in said sensor plate to facilitate grasping by hand.

7. The web transfer mechanism of claim 3, said sensor plate further including a web sensing finger movable into a slot of said sensing mechanism, the web sensing finger resting upon the pre-feed portion of sheet material web in the web-present position, and 15 residing in said slot in the web-absent position.

8. The web transfer mechanism of claim 7, said sensor plate further including a plurality of said web sensing fingers, said sensing mechanism including a plurality of said slots aligned, respectively, with said web sensing fingers.

9. The web transfer mechanism of claim 1, wherein said feed roller includes a 20 circumferential groove and said transfer arm includes a web transfer finger that advances into the circumferential groove when said transfer arm moves into said transfer position.

10. The web transfer mechanism of claim 1, wherein the transfer arm is mounted such that upon movement of the transfer arm to the transfer position, and a driving of the feed

roller, the leading end portion of sheet material web is carried through the nip and along a path avoiding subsequent contact of the web with said transfer arm.

11. The web transfer mechanism of claim 1, wherein said stop arm includes a coupling end, a stop end and an intermediate pivot axis, said coupling end being depressed to said second position by the sensor plate moving into the web-absent position, said stop end being disposed to maintain the transfer arm in a set position spaced from said main feed roller when the stop arm is in said first position.

12. The web transfer mechanism of claim 11, wherein said stop arm has a first arcuate edge surface that allows the stop arm to rotate upwards into said second position in slidable engagement with the transfer arm.

13. The web transfer mechanism of claim 12, wherein said stop arm further includes a second arcuate edge surface adjacent said first arcuate edge surface and which permit a free pivotal movement of said transfer arm into said transfer position upon said transfer arm disengaging from said first arcuate edge surface.

14. The web transfer mechanism of claim 1, further comprising a front shield structure defining a space between the main feed roller and the transfer arm, for presetting and retaining a leading end portion of sheet material web from the reserve roll for subsequent transfer of feed thereto.

15. A web transfer mechanism for providing, in a flexible sheet material dispenser, automatic transfer of web feed from a working roll to a reserve roll, comprising:

a main feed roller and a second roller forming a feed nip for receiving therethrough a sheet material web;

a transfer arm mounted adjacent to the main feed roller, said transfer arm being movable into a transfer position, wherein movement of the transfer arm into the transfer position is operative to drive a leading end portion of sheet material web extending from said reserve roll into the vicinity of the nip such that upon driving of the main feed roller the web
5 from the reserve roll is carried through the nip;

a dispenser cover member; and

a movable shield member, the shield member being biased to move into an open position automatically when said cover member is moved to an open position, said shield member presenting, when in its open position, a space for placement and retention of said
10 leading end portion of sheet material web between the transfer arm and main feed roller, to thereby pre-set said leading end portion for a subsequent transfer of feed thereto.

16. The web transfer mechanism of claim 15, wherein movement of the dispenser cover into a closed position automatically moves the shield member into a closed position.